09758917

STRUCTURE UPLOADED L2

=> d

L2 HAS NO ANSWERS

STR L2

Structure attributes must be viewed using STN Express query preparation.

=> s 12

SAMPLE SEARCH INITIATED 11:36:09 FILE 'BEILSTEIN' SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED SEARCH TIME: 00.00.01

0 ITERATIONS

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS:

0 TO

PROJECTED ANSWERS:

0 TO 0

0 SEA SSS SAM L2

=> s 12 sss full

FULL SEARCH INITIATED 11:36:19 FILE 'BEILSTEIN'

0 TO ITERATE FULL SCREEN SEARCH COMPLETED -

100.0% PROCESSED SEARCH TIME: 00.00.03

0 ITERATIONS

0 ANSWERS

0 SEA SSS FUL L2

= >

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09758917
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=> s e3 1 234779-34-1/RN L1

=> d all

ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN L1

RN

234779-34-1 REGISTRY Entered STN: 25 Aug 1999 ED

1H-Benz [de] isoquinoline-1,3(2H)-dione, 2-[(2-hydroxyethyl)amino]-5-nitro-CN(9CI) (CA INDEX NAME)

OTHER NAMES:

ALE 0540 CN

FS 3D CONCORD

C14 H11 N3 O5 MF

srCA

STN Files: BIOSIS, CA, CAPLUS, CHEMCATS LC

Ring System Data

Elemental	Elemental	Size of	Ring System	Ring	RIĎ		
Analysis	Sequence	the Rings	Formula	Identifier	Occurrence		
EA	ES	SZ	RF	RID	Count		
======+++======++=====++=+=+=====++=====							
C5N-C6-C6 NC5-C6-C6 6-6-6			C12N	1784.14.8	1		

$$\begin{array}{c|c} & \text{NH-CH}_2\text{-CH}_2\text{-OH} \\ & \text{O}_2\text{N} \end{array}$$

Calculated Properties (CALC)

PROPERTY (CODE)	VALUE	CONDITION	NOTE
Bioconc. Factor (BCF) Bioconc. Factor (BCF) Bioconc. Factor (BCF)	1	рн 1	(1) ACD
	1	рн 4	(1) ACD
	1	рн 7	(1) ACD
Bioconc. Factor (BCF)	1	рн 8	(1) ACD
Bioconc. Factor (BCF)	1	рн 10	(1) ACD
Boiling Point (BP) Enthalpy of Vap. (HVAP) Flash Point (FP)	553.0+/-60.0 deg C 87.73+/-3.0 kJ/mol 288.3+/-59.2 deg C	760.0 Torr 	(1) ACD (1) ACD (1) ACD
H acceptors (HAC)	8		(1) ACD
H donors (HD)	2		(1) ACD
Koc (KOC) Koc (KOC)	34.2	рН 1	(1) ACD
	34.2	рН 4	(1) ACD
	34.2	рН 7	(1) ACD
Koc (KOC) Koc (KOC) Koc (KOC)	34.2 34.2 34.2	pH	(1) ACD (1) ACD
logD (LOGD)	0.29	рн 1	(1) ACD
logD (LOGD)		рн 4	(1) ACD
logD (LOGD)	0.29	рн 7	(1) ACD
logD (LOGD)	0.29	рн 8	(1) ACD
logD (LOGD)	0.29	рн 10	(1) ACD
<pre>logP (LOGP) Molar Solubility (SLB.MOL)</pre>	!	рн 1	(1) ACD (1) ACD
Molar Solubility (SLB.MOL) Molar Solubility (SLB.MOL) Molar Solubility (SLB.MOL)	>=0.01 - <0.1 mol/L	рН 7	(1) ACD (1) ACD (1) ACD
Molar Solubility (SLB.MOL)	>=0.01 - <0.1 mol/L	рН 10	(1) ACD
Molecular Weight (MW)	301.25		(1) ACD
Vapor Pressure (VP)	4.59E-13 Torr	25.0 deg C	(1) ACD

(1) Calculated using Advanced Chemistry Development (ACD/Labs) Software Solaris V4.67 ((C) 1994-2004 ACD/Labs)

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See HELP PROPERTIES for information about property data sources in REGISTRY.
                2 REFERENCES IN FILE CA (1907 TO DATE)
                2 REFERENCES IN FILE CAPLUS (1907 TO DATE)
REFERENCE 1
     135:298810 CA
ΑN
     Use of NGF antagonists for the prevention or treatment of chronic visceral
TΙ
     pain
IN
     Diop, Laurent; Delafoy, Laure
     Warner-Lambert Company, USA
PA
so
     PCT Int. Appl., 26 pp.
     CODEN: PIXXD2
DТ
     Patent
     English
LА
TC
     ICM A61K031-00
          A61K031-473; A61K039-395; A61P015-00; A61P001-06; A61P001-18;
     ICS
          A61P001-14; A61P001-00
CC
     1-11 (Pharmacology)
     Section cross-reference(s): 2, 63
FAN.CNT 1
     PATENT NO.
                       KIND DATE
                                             APPLICATION NO. DATE
                                                               20010326
                             20011025
                                             WO 2001-EP3490
PΙ
     WO 2001078698
                        A2
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
              SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
              YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                        A1
                                                               20000413
     FR 2807660
                             20011019
                                             FR 2000-4782
                             20030212
                                             EP 2001-927818
                                                               20010326
     EP 1282421
                        A2
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                             BR 2001-10028
                                                                20010326
     BR 2001010028
                        Α
                             20030603
                        T2
                            20031014
                                             JP 2001-575999
                                                               20010326
     JP 2003530427
PRAI FR 2000-4782
                       20000413
     WO 2001-EP3490
                       20010326
     A nerve growth factor (NGF) antagonist is used for the manufacture of a
AB
     medicament intended for the prevention or treatment of chronic visceral
     pain. Corresponding pharmaceutical compns. are also disclosed.
ST
     NGF antagonist chronic visceral pain treatment
TT
     Analgesics
     Drug delivery systems
     Dysmenorrhea
     Dyspepsia
         (NGF antagonists for prevention or treatment of chronic visceral pain)
TT
     Nerve growth factor receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (NGF antagonists for prevention or treatment of chronic visceral pain)
IT
     Pain
         (chronic; NGF antagonists for prevention or treatment of chronic
         visceral pain)
IT
     Digestive tract
         (gastroesophageal reflux; NGF antagonists for prevention or treatment
         of chronic visceral pain)
IT
     Intestine, disease
         (irritable bowel syndrome; NGF antagonists for prevention or treatment
         of chronic visceral pain)
     Drug delivery systems
IT
         (oral; NGF antagonists for prevention or treatment of chronic visceral
         pain)
     Viscera
IT
         (pain; NGF antagonists for prevention or treatment of chronic visceral
         pain)
TT
     Pancreas, disease
         (pancreatitis; NGF antagonists for prevention or treatment of chronic
     Antibodies
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
      (Uses)
         (to NGF; NGF antagonists for prevention or treatment of chronic
```

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visceral pain)
     Viscera
IT
        (visceralgia; NGF antagonists for prevention or treatment of chronic
        visceral pain)
     234779-34-1, ALE 0540
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
        (NGF antagonists for prevention or treatment of chronic visceral pain)
     137010-36-7, NGF receptor tyrosine kinase
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (NGF antagonists for prevention or treatment of chronic visceral pain)
     9061-61-4, Nerve growth factor
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (NGF antagonists for prevention or treatment of chronic visceral pain)
REFERENCE 2
     131:125331 CA
AN
     Characterization of antiallodynic actions of ALE-0540, a novel nerve
TΙ
     growth factor receptor antagonist, in the rat
     Owolabi, Joshua B.; Rizkalla, Geihan; Tehim, Ashok; Ross, Gregory M.;
     Riopelle, Richard J.; Kamboj, Rajender; Ossipov, Michael; Bian, Di;
     Wegert, Sandara; Porreca, Frank; Lee, David K. H. Allelix Biopharmaceuticals Inc., Mississauga, Can.
CS
     Journal of Pharmacology and Experimental Therapeutics (1999), 289(3),
SO
     1271-1276
     CODEN: JPETAB; ISSN: 0022-3565
     American Society for Pharmacology and Experimental Therapeutics
ΡB
DT
     Journal
LA
     English
     1-11 (Pharmacology)
CC
     There is growing evidence that nerve growth factor (NGF) may function as a
     mediator of persistent pain states. We have identified a novel
     nonpeptidic mol., ALE-0540, that inhibits the binding of NGF to tyrosine
     kinase (Trk) A or both p75 and TrkA (IC50 5.88\pm1.87~\mu M, 3.72\pm1.3
     μM, resp.), as well as signal transduction and biol. responses mediated
     by TrkA receptors. ALE-0540 was tested in models of neuropathic pain and
     thermally-induced inflammatory pain, using two routes of administration, a
     systemic i.p. and a spinal intrathecal (i.t.) route. Morphine was also
     tested for comparison in the antiallodynia model using mech. stimuli. We
     show that either i.p. or i.t. administration of ALE-0540 in rats produced
     antiallodynia in the L5/L6 ligation model of neuropathic pain. The calculated
     A50 values (and 95% confidence intervals) for ALE-0540 administered i.p. and i.t. were 38 (17.5-83) mg/kg and 34.6 (17.3-69.4) µg, resp.
     ALE-0540 given i.t., at doses of 30 and 60 µg, also blocked tactile allodynia in the thermal sensitization model. Although morphine displayed
     greater potency [A50 value of 7.1 (5.6-8.8) mg/kg] than ALE-0540 in
     anti-allodynic effect when given i.p. to L5/L6-ligated rats, it was not
     active when administered i.t. These data suggest that a blockade of NGF
     bioactivity using a NGF receptor antagonist is capable of blocking
     neuropathic and inflammatory pain and further support the hypothesis that
     NGF is involved in signaling pathways associated with these pain states.
     ALE-0540 represents a nonpeptidic small mol. which can be used to examine
     mechanisms leading to the development of agents for the treatment of pain.
ST
     ALE 0540 antiallodynia nerve growth factor
     Pain
     Skin, disease
        (allodynia; characterization of antiallodynic actions of ALE-0540, a
        novel nerve growth factor receptor antagonist, in the rat)
тт
     Analgesics
        (characterization of antiallodynic actions of ALE-0540, a novel nerve
        growth factor receptor antagonist, in the rat)
ÍΤ
     Nerve growth factor receptors
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (characterization of antiallodynic actions of ALE-0540, a novel nerve
        growth factor receptor antagonist, in the rat)
     234779-34-1, ALE 0540
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (characterization of antiallodynic actions of ALE-0540, a novel nerve
        growth factor receptor antagonist, in the rat)
TT
     9061-61-4, Nerve growth factor
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (characterization of antiallodynic actions of ALE-0540, a novel nerve
        growth factor receptor antagonist, in the rat)
```

- THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 40 (1) Aloe, L; Arthritis Rheumat 1992, V35, P351 MEDLINE (2) Andreev, N; Pain 1995, V63, P109 CAPLUS (3) Averill, S; Eur J Neurosci 1995, V7, P1484 MEDLINE (4) Chaplan, S; J Neurosci Methods 1994, V53, P55 MEDLINE (5) Chung, K; Neurosci Lett 1993, V162, P85 MEDLINE (6) Crowley, C; Cell 1994, V76, P1001 CAPLUS (7) Diamond, J; Proc Natl Acad Sci USA 1987, V84, P6596 CAPLUS (8) Dixon, W; Annu Rev Pharmacol Toxicol 1980, V20, P441 MEDLINE (9) Donnerer, J; Neuroscience 1992, V49, P693 CAPLUS (10) Dostaler, S; Eur J Neurosci 1996, V8, P870 MEDLINE (11) Greene, L; Proc Natl Acad Sci USA 1976, V73, P2424 CAPLUS (12) Heumann, R; J Cell Biol 1987, V104, P1623 CAPLUS (13) Jaen, J; J Med Chem 1995, V38, P4439 CAPLUS (14) Kaplan, D; Nature (Lond) 1991, V350, P158 CAPLUS (15) Karlsten, R; Neurosci Lett 1991, V121, P267 CAPLUS (16) Kim, S; Pain 1992, V50, P355 MEDLINE (17) Lewin, G; Eur J Neurosci 1994, V6, P1903 MEDLINE (18) Lewin, G; J Neurosci 1993, V13, P2136 CAPLUS (19) Lewin, G; Trends Neurosci 1993, V16, P353 CAPLUS (20) Max, M; Clin Pharmacol Ther 1988, V43, P363 MEDLINE (22) Mazzari, S; Eur J Pharmacol 1996, V300, P227 CAPLUS (24) Murphy, R; J Neurosci 1993, V13, P2853 CAPLUS (25) Nichols, M; Soc Neurosci Abstr 1995, V21, P1172 (26) Pertovaara, A; Eur J Pharmacol 1990, V179, P323 CAPLUS (27) Petty, B; Ann Neurol 1994, V36, P244 CAPLUS (28) Porreca, F; Life Sci 1983, V33, P457 CAPLUS (29) Ramer, M; Pain 1997, V70, P237 MEDLINE (30) Ramer, M; Soc Neurosci Abstr 1995, V21, (33) Spiegel, K; Biochem Biophys Res Commun 1995, V217, P488 CAPLUS
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- (40) Yaksh, T; Physiol Behav 1976, V17, P1031 MEDLINE